Spring 2014

BLUESTEM

Newsletter for the Louisiana Natural Areas Registry

Working with Landowners towards Conservation of Louisiana's Native Habitats

Volume 1, Issue 1

In This Issue

Page 2
New Additions to the Registry

Page 3
The Louisiana Master Naturalist Program

Page 4
Grasses are Wind Pollinated, Right?

Page 6
Louisiana Natural Heritage Program Staff

Back Cover
Mystery Plant

Greetings Natural Area Members!

As you know, our Natural Areas Biologist position has been vacant since 2012 and the duties have subsequently been divided amongst three of our biologists. We thank you for bearing with us as we do our best to keep up with the increased work load. This year our staff decided it was time for a newsletter makeover. Therefore it is my pleasure to introduce you to the new newsletter for the Louisiana Natural Areas Registry Program: *Bluestem*. It didn't take long for our botanist, Chris Reid, to come up with this very fitting name, although not before humorously suggesting alternatives like "The Salvinia," "Carpetgrass," and my favorite "The Privet Bush." There are several grass genera that are referred to as bluestems and these include native and exotics. The bluestems we specifically had in mind when naming this newsletter were little bluestem (*Schizachyrium scoparium*) and big bluestem (*Andropogon gerardii*). Both of these grasses are perennial bunch grasses that occur in prairies and pine grasslands and are what we call "conservative" species, because they are long-lived and are indicative of undisturbed sites. The complete opposite of a conservative plant is a weedy plant that colonizes disturbed areas and does not persist long without soil disturbance. Little bluestem is the most abundant grass of our prairies and pine grasslands, while big bluestem is usually an interstitial grass, but can form large stands on drier prairies. Thank you to all our registry members for participating in our program and helping us protect Louisiana's natural heritage. We hope you enjoy this issue's exciting updates, informative articles, and new look!

- Sairah

Little Bluestem (*Schizachyrium scoparium*)
(Photos by Larry Allain)

New Additions to the Registry

Over the past year we have added two new natural areas to the Registry! In this issue we recognize Jack and Marsha Land, owners of Sugar Creek Camp Natural Area, and Claude and Evelyn-Jane Frey, owners of Hoover Lake Natural Area.

Sugar Creek Camp - Lincoln Parish

Sugar Creek Camp Natural Area contains mixed hardwood-loblolly pine and shortleaf pine-oak-hickory forests. Mixed hardwood-loblolly forests occur in a mosaic with shortleaf pine-oak-hickory forests, which were historically the most prevalent community in the Upper West Gulf Coastal Plain. The overstory in mixed hardwood-loblolly forests are comprised of 20 percent or more loblolly pine (*Pinus taeda*), along with various hardwood species. Some rare species associated with these community types include the long-tailed weasel, wood thrush, scarlet kingsnake, and the Louisiana slimy salamander.

Sugar Creek Camp's beautiful mixed hardwood-loblolly pine forest

Amity and Mr. Frey exploring Hoover Lake's cypress swamp

Chris & Sairah, along with Natural Areas member Johnny Armstrong, presenting Mr. Land's Certificate of Acknowledgement

Sairah presenting Mr. and Mrs. Frey's Certificate of Acknowledgment

Hoover Lake Natural Area - Catahoula Parish

Hoover Lake Natural Area contains a bottomland hardwood forest and baldcypress swamp. The natural area includes an oxbow lake, which is an abandoned river channel. This area provides an important refuge for local wildlife, as the surrounding landscape largely consists of agricultural land. The property supports several ancient bald cypress trees. Mr. Frey, a retired forester, estimated one of them to be around 1,000 years old. Some rare species associated with these habitats are the alligator snapping turtle, the swallow-tailed kite, and the long-tailed weasel.

The Louisiana Master Naturalist Program

BY Sairah Javed, *LDWF Field Biologist and*
Julia Lightner, *Vice President of LMNP-GNO*

Do you find yourself wondering what a particular plant is or wishing you knew more about the environment you live in? Are you fascinated by the outdoors and wish you could spread the word about how wonderful the natural world is? If you answered an enthusiastic "Yes!" to both questions then the Louisiana Master Naturalist Program (LMNP) might be your niche! The Louisiana Master Naturalist Program is designed to educate citizens about Louisiana's natural environment. The program gives citizens the opportunity to gain or improve upon existing knowledge of the state's ecoregions, flora, and fauna, and their connections to Louisiana's culture and economy. The program consists of classroom presentations combined with guided field experiences. Once a Master Naturalist, you will use your expertise to help educate others and assist conservation programs. Currently, chapters exist in New Orleans, Lafayette, and Shreveport. In the future the program will expand statewide and include chapters in Lake Charles, Alexandria, Monroe, and Baton Rouge. Occasional state gatherings will also take place so members can come together to share knowledge and ideas. Educational content for each chapter varies from region to region, with some overlap, but all present an overview of Louisiana's natural history and deliver the same quality experience.

Certification Program Requirements

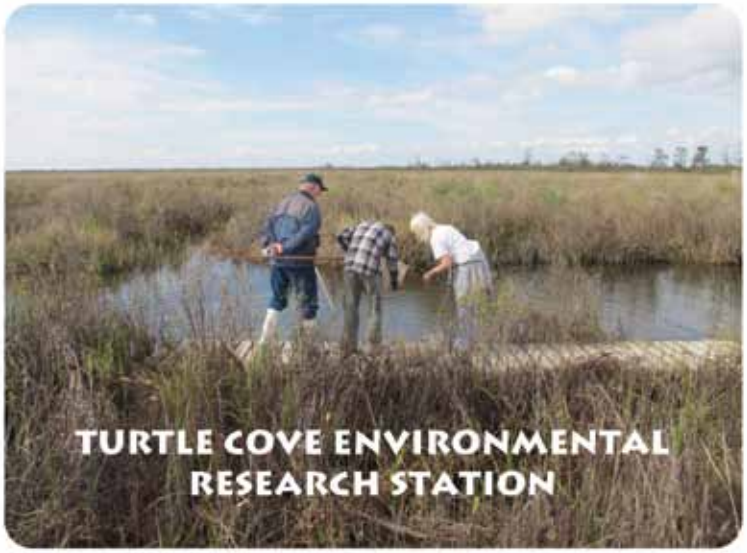
- **46-58 hours of class and field training**
- **20 hours of volunteer service**
- **8 hours of advanced training**
- **Satisfactory completion of exit exam**
- **$25 membership fee**

For more information visit *www.louisianamasternaturalist.org* OR contact a chapter near you:

- Acadiana Chapter - Stacey Scarce, SScarce@LafayetteLA.gov
- Greater New Orleans Chapter - Bob Thomas, (office) 504-865-2107, (cell) 504-909-6568, rathomas48@gmail.com
- Northwest Chapter (Shreveport/Bossier area) - Russell Scarborough, (office) 318-929-2806, rscarborough@caddo.org

BENEFITS OF BECOMING A MASTER NATURALIST:

- Become part of a network of people passionate about Louisiana's natural history
- Understand the interconnections among our flora and fauna and the well-being of our ecosystems, economic foundation, and cultural community



Grasses are Wind Pollinated, Right?

BY Tim Jones, *Louisiana State University,*
Chris Reid, *LDWF Botanist* and
Sairah Javed, *LDWF Field Biologist*

Bees are well known as pollinators of fruit trees and other crops, but not for grasses. Grasses are frequently described in the botanical literature as being wind-pollinated. Grass flowers are tiny and naked (lacking sepals and petals) and are not fragrant. The rationale for wind pollination of grasses (and sedges and rushes as well) that is often given is they are not showy and are presumably unattractive to bees and other insect pollinators. Tim Jones, a graduate student and botanist from Louisiana State University, has recently published a journal article in *Biodiversity Data Journal* (*biodiversitydatajournal.com/articles.php?id=1101*), offering visual evidence of honey bees collecting pollen from centipede grass (*Eremechloa ophioroides*), a common turf grass. This serendipitous observation was noted due to the loud buzzing of bees in Tim's yard, but without an obvious plant source; that is until Tim looked down at the lawn and noticed honey bees actively visiting centipede grass.

Tim made his observations by sitting/walking around the lawn, and documented occurrences of honey bees visiting centipede grass with both video and still imagery. Nearby flowering plants that could provide potential forage for bees were recorded. A total of three bees visiting the grass flowers were then collected and examined by Louisiana State University Arthropod Museum. Pollen samples from the corbiculae (pollen sacs) of the three sampled bees were sent to staff of Louisiana State University Center for Excellence in Palynology, Washington State University, and University of Arizona to check the identity of their pollen loads. Pollen analyses confirmed that the bees were exclusively gathering grass pollen. Observations made with macro-photography revealed that the bees moved grass pollen substantial distances when travelling from one inflorescence to another. Even though they are small and lack showy petals, most grass flowers are quite colorful when blooming with often brightly colored anthers and/or stigmas. Additionally, they present ultraviolet visual cues that are visible to the bees but invisible to humans. This contrast reveals an interesting question: is this just a scale problem for attractiveness? Honey, a well-documented economic commodity that is studied and sampled for purity and origins, tells a different story from botanical literature. Melissopalynology, or the study of pollen in honey, describes the collection of grass pollen by honey bees as commonplace. "In researching the phenomenon for this research article, it became apparent that entomologists and melissopalynologists were well aware that bees frequently gather grass as well as sedge pollen," says Tim. Yet, traditional botanical literature still regards grasses as being exclusively wind pollinated. It is not clear why this information has not been incorporated into the botanical literature. It is obvious that this significant disconnect between experts could use more study and research, as grasses are one of the most ecologically and ethnobotanically important plant groups.

ABOVE: Collected honey bee with body dusted in pollen and packed pollen baskets or corbiculae

RIGHT: Honey bee moving pollen up the inflorescense, while also spreading pollen through biotic winds; here with pollen visible at left and below bee

(Photos by Tim Jones)

LEFT: Centipede grass inflorescence. The flowers, with their violet anthers, are attractive when you look closely.

RIGHT: Honey bee gathering centipede grass pollen.

(Photos by Tim Jones)

Member Contributions

As part of the new design of the Natural Areas newsletter, we would like to include a section in each issue of *Bluestem* for member contributions. Any Natural Areas member may submit news, an informative article, or images for potential publication in *Bluestem*. The content could report new developments on a Natural Area or share information that might be interesting to other members. To contribute to the Members Section, email your contribution to Chris Reid (creid@wlf.la.gov) or save it to a CD and snail mail it to him.

Louisiana Natural Heritage Program Staff

Louisiana Department of Wildlife and Fisheries
2000 Quail Drive
Baton Rouge, LA 70898
(225) 765-2820

Amity Bass
Program Manager
abass@wlf.la.gov
(225) 765-2975

Nicole Lorenz
Data Manager
nlorenz@wlf.la.gov
(225) 765-2643

Carolyn Michon
Assistant Data Manager
cmichon@wlf.la.gov
(225) 765-2357

Sam Holcomb
State Wildlife Grants Coordinator
sholcomb@wlf.la.gov
(225) 765-0239

Chris Reid
Botanist
creid@wlf.la.gov
(225) 765-2820

Jeff Boundy
Herpetologist
jboundy@wlf.la.gov
(225) 765-2815

Amity Bass

Nicole Lorenz

Chris Reid

Jeff Boundy

Keri Landry

Sairah Javed

Charles Battalgia

Tracy Mancuso

Carolyn Michon

Sam Holcomb

Beau Gregory

Michael Seymour

Dan O'Malley

Neil Douglas

Zach Leggett

Beau Gregory
Zoologist
bgregory@wlf.la.gov
(225) 765-2820

Michael Seymour
Ornithologist
mseymour@wlf.la.gov
(225) 765-3554

Keri Landry
Endangered Species Biologist
klandry@wlf.la.gov
(225) 765-2809

Sairah Javed
Field Biologist
sjaved@wlf.la.gov
(225) 765-2828

Dan O'Malley
Field Biologist
domalley@wlf.la.gov
(225) 765-2823

Neil Douglas
Turtle Biologist
nhdouglas@att.net

Charles Battalgia
Field Biologist
cbattalgia@wlf.la.gov

Tracy Mancuso
Administrative Assistant
tmancuso@wlf.la.gov
(225) 765-2812

Zach Leggett
Student Worker
zleggett@wlf.la.gov

Visit us on the Web!

www.wlf.louisiana.gov/wildlife/louisiana-natural-heritage-program

LOUISIANA NATURAL HERITAGE PROGRAM
Louisiana Department of Wildlife & Fisheries
P.O. Box 98000
Baton Rouge, LA 70898

This public document was published at a total cost of $. 130 copies of this public document were published in the first printing at a cost of $. This document was published by the Louisiana Department of Wildlife and Fisheries, 2000 Quail Drive, Baton Rouge, LA to provide information to Louisiana residents and non-residents about the Louisiana Natural Areas Registry Program. This material was printed in accordance with the standards for printing by state agencies established pursuant to R.S. 43:31. Printing of this material was purchased in accordance with the provisions of Title 43 of the Louisiana Revised Statutes.

MYSTERY PLANT

This mystery plant is an invasive exotic shrub, native to Asia. It is commonly used in landscaping and readily escapes into adjacent areas. It is an up-and-coming weed that is underreported and it warrants serious attention. This plant invades moist forests including high sites in bottomland hardwoods, small stream forests, hardwood slope forests, and it is not infrequent in the southern mesophytic forests of the Tunica Hills around St. Francisville.

WHAT IS IT?

Email your answers to Chris Reid (creid@wlf.la.gov) or Sairah Javed (sjaved@wlf.la.gov)

Photo by Laura Mullen